Claims:

1. A method for transmitting wireless data using an adaptive frequency selection, the method being used in a device which includes a master and a slave and locally transmits wireless data in a frequency-changeable manner, the method comprising the steps of:

finding and storing a replacement channel with no interference which has a different frequency from a setup channel set as a data transmission channel;

checking whether there is interference in the replacement and setup channels while alternately transmitting data through the setup and replacement channels; and

when there is continuous channel interference in the setup channel, transmitting data after changing the stored replacement data to a new setup channel.

2. The method as set forth in claim 1, further comprising the step of:

when there is continuous interference in the replacement channel, discarding the stored replacement channel information, and finding and storing a new replacement channel with no interference.

3. The method as set forth in claims 1 or 2, wherein the slave reports to the master information on whether channel interference occurs while transmitting data through the stored replacement channel.

4. The method as set forth in claim 3, wherein the check on whether there is channel interference is performed based on whether access codes inserted in transmitted and received packets are identical.

5. The method as set forth in claim 3, wherein the check on whether there is channel interference is performed based on the number of RS-decoder bit errors of real-time data inserted in a received packet, or based on the number of bit errors of non-real-time data known to the master and slave.

6. The method as set forth in claims 4 or 5, wherein a check on whether the channel interference continuously occur is performed by comparing the accumulated number of the bit errors of the real-time data and non-real-time data or the accumulated number of the non-identical bits of the access codes for a predetermined period of time with a corresponding prestored threshold value.

7. The method as set forth in claims 1 or 2, wherein a length of data transmission period through the replacement channel is set to a length in which it is possible for the slave to recover loss of data transmitted through the replacement channel by obtaining and deinterleaving both data received before changing to the replacement channel and data received after returning to the setup channel.

8. A method for transmitting wireless data using an adaptive frequency selection, the method being used in a device which includes a master and a slave and locally transmits wireless data in a frequency-changeable manner, the method comprising the steps of:

a first step of transmitting and receiving data through a setup channel;

a second step of, when there is no replacement channel, setting a channel, which has a different frequency from the setup channel, as a temporary replacement channel, and then checking whether there is channel interference while transmitting and receiving data;

a third step of, when there is no channel interference, storing the temporary replacement channel as a replacement channel and then returning to the setup channel;

a fourth step of checking whether there is interference in the setup channel and the stored replacement

channel while alternately transmitting data through the setup channel and the stored replacement channel; and

a fifth step of, when interference continuously occurs in the setup channel, transmitting data after changing the stored replacement channel to a new setup channel.

9. The method as set forth in claim 8, wherein, when interference continuously occurs in the stored replacement channel, the stored replacement channel is discarded and the procedure returns to the second step.

10. A device for transmitting wireless data through an adaptive frequency selection by using a frequency hopping scheme, the device comprising:

a transmission data generator for appending at least a redundancy and CRC for error recovery to data to be transmitted, and interleaving and outputting the resulting data;

an access code generator for appending an access code to the outputted transmission data, and packetizing the resulting data;

an access code detector for detecting an access code from a received packet;

a received data restoration unit for checking a CRC in data of the received packet to determine whether an error

occurs in the data, and then RS-decoding deinterleaved data to recover a data loss,

the device further comprising:

a channel interference detector for comparing the accumulated number of non-identical bits of access codes detected for a predetermined period of time with a prestored threshold value, and detecting from the comparison result whether channel interference occurs;

a hopping frequency generator for generating random hopping frequencies in response to a device address and a clock inputted thereto; and

a transmission/reception controller for searching channels of the random hopping frequencies for one channel with no interference, storing the searched channel as a replacement channel, and, if interference is continuously detected by the channel interference detector while alternately transmitting data through the setup channel and the replacement channel, and then changing the replacement channel to a new setup channel or searching for a new replacement channel and storing the searched replacement channel.

11. The device as set forth in claim 10, wherein the channel interference detector detects whether channel interference occurs by accumulating the number of data bit

errors of the received packet and then comparing the accumulated number of data bit errors with another threshold value.

12. The device as set forth in claim 10, wherein the transmission/reception controller includes an internal memory storing program data for searching for a channel with no interference, the program data allowing the device to sequentially perform the steps of:

requesting a slave to perform a corresponding process for allowing data transmission and reception through one of the random hopping frequencies generated from the hopping frequency generator;

transmitting/receiving data through the requested channel frequency; and

storing the hopping frequency as information of the replacement channel when there is no channel interference.